

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

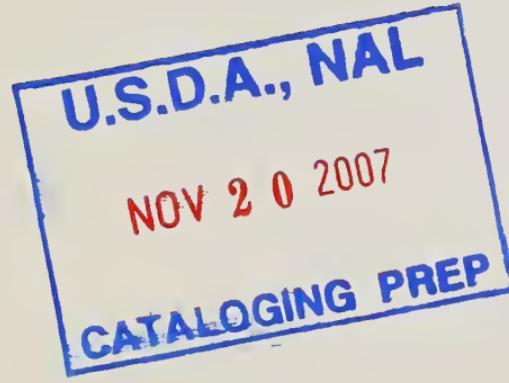
United States Department of Agriculture

Human Nutrition Information Service

HNIS/PT-103

Provisional Table on the Content of Omega-3 Fatty Acids and Other Fat Components in Selected Foods

aTX560
.F3E94
1988



For research use only

Prepared by Jacob Exler
and John L. Weihrauch

Data for the following omega-3 fatty acids are included in this table:

- 18:3 linolenic acid
- 20:5 eicosapentaenoic acid (EPA)
- 22:6 docosahexaenoic acid (DHA)

Mention of commercial products in this publication is solely for identification purposes and does not constitute endorsement by the U.S. Department of Agriculture over other products not mentioned.

United States
Department of
Agriculture

NATIONAL
AGRICULTURAL
LIBRARY



Advancing Access to
Global Information for
Agriculture

Nutrient Data Research Branch
Nutrition Monitoring Division
Slightly revised May 1986
Slightly revised October 1988

Provisional Table on the Content of Omega-3 Fatty Acids and Other Fat Components in Selected Foods (100 Grams Edible Portion, Raw)

Dashes (—) denote lack of reliable data for nutrient known to be present.

Tr= trace (less than 0.05 grams per 100 grams of food.)

Food item	Fatty Acids									
	Total fat	Total saturated	Total monounsaturated	Total polyunsaturated	18:3	20:5	22:6	Cholesterol	mg	
	g	g	g	g	g	g	g	g	mg	

Finfish

Anchovy, European.....	4.8	1.3	1.2	1.6	--	0.5	0.9	--	
Bass, freshwater.....	2.0	.4	.7	.7	Tr	.1	.2	59	
Bass, striped.....	2.3	.5	.7	.8	Tr	.2	.6	80	
Bluefish.....	6.5	1.4	2.9	1.6	--	.4	.8	59	
Burbot.....	.8	.2	.1	.3	--	.1	.1	60	
Capelin.....	8.2	1.5	3.8	1.5	.1	.6	.5	--	
Carp.....	5.6	1.1	2.3	1.4	.3	.2	.1	67	
Catfish, brown bullhead...	2.7	.6	1.0	.8	.1	.2	.2	75	
Catfish, channel.....	4.3	1.0	1.6	1.0	Tr	.1	.2	58	
Cisco.....	1.9	.4	.5	.6	.1	.1	.3	--	
Cod, Atlantic.....	.7	.1	.1	.3	Tr	.1	.2	43	
Cod, Pacific.....	.6	.1	.1	.2	Tr	.1	.1	37	
Croaker, Atlantic.....	3.2	1.1	1.2	.5	Tr	.1	.1	61	
Dogfish, spiny.....	10.2	2.2	4.2	2.7	.1	.7	1.2	52	
Dolphinfish.....	.7	.2	.1	.2	Tr	Tr	.1	--	
Drum, black.....	2.5	.7	.8	.5	Tr	.1	.1	--	
Drum, freshwater.....	4.9	1.1	2.2	1.2	.1	.2	.3	64	
Eel, European.....	18.8	3.5	10.9	1.4	.7	.1	.1	108	
Flounder, unspecified.....	1.0	.2	.3	.3	Tr	.1	.1	46	
Flounder, yellowtail.....	1.2	.3	.2	.3	Tr	.1	.1	--	
Grouper, jewfish.....	1.3	.3	.3	.4	Tr	Tr	.3	49	
Grouper, red.....	.8	.2	.1	.2	--	Tr	.2	--	
Haddock.....	.7	.1	.1	.2	Tr	.1	.1	63	
Hake, Atlantic.....	.6	.2	.2	.1	Tr	Tr	--		
Hake, Pacific.....	1.6	.3	.3	.6	Tr	.2	.2	--	
Hake, red.....	.9	.2	.3	.3	--	.1	.1	--	
Hake, silver.....	2.6	.5	.7	.9	.1	.2	.3	--	
Hake, unspecified.....	1.9	.5	.6	.5	--	.1	.4	--	
Halibut, Greenland.....	13.8	2.4	8.4	1.4	Tr	.5	.4	46	
Halibut, Pacific.....	2.3	.3	.6	.7	.1	.1	.3	32	
Herring, Atlantic.....	9.0	2.0	3.7	2.1	.1	.7	.9	60	
Herring, Pacific.....	13.9	3.3	6.9	2.4	.1	1.0	.7	77	
Herring, round.....	4.4	1.3	.6	1.5	.1	.4	.8	28	
Mackerel, Atlantic.....	13.9	3.6	5.4	3.7	.1	.9	1.6	80	
Mackerel, chub.....	11.5	3.0	4.7	3.0	.3	.9	1.0	52	
Mackerel, horse.....	4.1	1.2	1.4	.9	Tr	.3	.3	41	
Mackerel, Japanese horse..	7.8	2.5	2.4	2.3	.1	.5	1.3	48	
Mackerel, king.....	13.0	2.5	5.9	3.2	--	1.0	1.2	53	
Mullet, striped.....	3.7	1.2	1.1	1.1	.1	.3	.2	49	
Mullet, unspecified.....	4.4	.3	1.3	1.5	Tr	.5	.6	34	
Ocean perch.....	1.6	.3	.6	.5	Tr	.1	.1	42	
Perch, white.....	2.5	.6	.9	.7	.1	.2	.1	80	
Perch, yellow.....	.9	.2	.1	.4	Tr	.1	.2	90	
Pike, northern.....	.7	.1	.2	.2	Tr	Tr	.1	39	
Pike, walleye.....	1.2	.2	.3	.4	Tr	.1	.2	86	
Plaice, European.....	1.5	.3	.5	.4	Tr	.1	.1	70	
Potlock.....	1.0	.1	.1	.5	--	.1	.4	71	
Pompano, Florida.....	9.5	3.5	2.6	1.1	--	.2	.4	50	

Finfish—Con.

Ratfish.....		1.2	0.3	0.4	0.1	Tr	Tr	0.1	--	
Rockfish, brown.....		3.3	.8	.8	1.0	Tr	.3	.4	--	
Rockfish, canary.....		1.8	.4	.5	.6	Tr	.2	.3	34	
Rockfish, unspecified.....		1.4	.2	.3	.6	Tr	.2	.3	--	
Sablefish.....		15.3	3.2	8.1	2.0	.1	.7	.7	49	
Salmon, Atlantic.....		5.4	.8	1.8	2.1	.2	.3	.9	--	
Salmon, chinook.....		10.4	2.5	4.5	2.1	.1	.8	.6	--	
Salmon, chum.....		6.6	1.5	2.9	1.5	.1	.4	.6	74	
Salmon, coho.....		6.0	1.1	2.1	1.7	.2	.3	.5	--	
Salmon, pink.....		3.4	.6	.9	1.4	Tr	.4	.5	--	
Salmon, sockeye.....		8.6	1.5	4.1	1.9	.1	.5	.7	--	
Sauries.....		9.2	1.6	4.8	1.8	.1	.5	.6	19	
Scad, Muroaji.....		8.7	2.8	2.2	2.6	.1	.5	1.5	47	
Scad, other.....		.5	.1	.1	.1	--	Tr	.1	27	
Sea bass, Japanese.....		1.5	.4	.3	.5	Tr	.1	.3	41	
Seatrout, sandi.....		2.3	.7	.8	.4	Tr	.1	.2	--	
Seatrout, spined.....		1.7	.5	.4	.3	Tr	.1	.1	--	
Shark, unspecified.....		1.9	.3	.4	.8	--	Tr	.8	44	
Sheepshead.....		2.4	.6	.7	.5	Tr	.1	.1	--	
Smelt, pond.....		.7	.2	.1	.3	--	.1	.1	72	
Smelt, rainbow.....		2.6	.5	.7	.9	.1	.3	.7	70	
Smelt, sweet.....		4.6	1.6	1.2	1.0	.3	.2	.2	25	
Snapper, red.....		1.2	.2	.2	.4	Tr	Tr	.1	--	
Sole, European.....		1.2	.3	.4	.2	Tr	Tr	.5	50	
Sprat.....		5.8	1.4	2.0	1.5	--	.5	.3	38	
Sturgeon, Atlantic.....		6.0	1.2	1.7	2.1	Tr	1.0	.1	--	
Sturgeon, coho.....		3.3	.8	1.6	.5	.1	.2	.2	--	
Sunfish, purpleseed.....		.7	.1	.1	.2	Tr	Tr	.1	67	
Swordfish.....		2.1	.6	.8	.2	--	.1	.1	39	
Trout, arctic char.....		7.7	1.6	4.6	.9	Tr	.1	.1	--	
Trout, brook.....		2.7	.7	.8	.9	.2	.2	.2	68	
Trout, lake.....		9.7	1.7	3.6	3.4	.4	.5	.5	48	
Trout, rainbow.....		3.4	.6	1.0	1.2	.1	.1	.1	57	
Tuna, albacore.....		4.9	1.2	1.2	1.8	.2	.3	.3	54	
Tuna, bluefin.....		6.6	1.7	2.2	2.0	--	.4	.3	38	
Tuna, skipjack.....		1.9	.7	.4	.6	--	.1	.1	47	
Tuna, unspecifid.....		2.5	.9	.6	.5	--	.1	.1	--	
Whitefish, lake.....		6.0	.9	2.0	2.2	.2	.3	.9	60	
Whiting, European.....		.5	.1	.1	.1	Tr	Tr	.1	31	
Wolfish, Atlantic.....		2.4	.4	.8	.8	Tr	.3	.1	--	
Crustaceans										
Crab, Alaska king.....		.8	.1	.1	.3	Tr	.2	.1	--	
Crab, blue.....		1.3	.2	.2	.5	Tr	.2	.4	78	
Crab, Dungeness.....		1.0	.1	.2	.3	--	.2	.1	59	
Crab, queen.....		1.1	.1	.2	.4	Tr	.2	.1	127	
Crustaceans—Con.										
Crayfish, unspecified.....		1.4	0.3	0.4	0.3	Tr	0.1	Tr	0.1	158
Lobster, European.....		.8	.1	.2	.2	--	.1	.1	.1	129
Lobster, northern.....		.9	.2	.2	.2	--	.1	.1	.1	95
Shrimp, Atlantic brown.....		1.5	.3	.3	.5	Tr	.2	.1	142	
Shrimp, Atlantic white.....		1.5	.2	.2	.6	Tr	.2	.2	182	
Shrimp, Japanese (kuruma) prawn.....		2.5	.5	.5	1.0	Tr	.3	.2	.2	58
Shrimp, northern.....		1.5	.2	.3	.6	Tr	.3	.2	125	
Shrimp, other.....		1.3	.4	.3	.3	Tr	.1	.1	.1	128
Shrimp, unspecified.....		1.1	.2	.1	.4	Tr	.2	.1	.1	147
Spiny lobster, Caribbean.....		1.4	.2	.2	.6	Tr	.2	.1	.1	140
Spiny lobster, southern rock.....		1.0	.1	.2	.2	Tr	.2	.1	.1	--
Mollusks										
Abalone, New Zealand.....		1.0	.2	.2	.2	Tr	Tr	--	--	--
Abalone, South African.....		1.1	.3	.3	.2	Tr	Tr	Tr	Tr	--
Clam, hardshell.....		.6	Tr</td							

Provisional Table on the Content of Omega-3 Fatty Acids and Other Fat Components in Selected Foods (100 Grams Edible Portion)

Dashes (—) denote lack of reliable data for nutrient known to be present.

Tr = trace (less than 0.05 grams per 100 grams of food.)

Food item	Total fat	Fatty acids					
		Total saturated	Total monounsaturated	Total polyunsaturated	18:3	Cholesterol	mg
g	g	g	g	g	mg	g	
Beef							
Chuck, blade roast, all grades, separable lean & fat, raw	23.6	10.0	10.8	0.9	0.3	73	
Ground, regular, raw	27.0	10.8	11.6	1.0	.2	85	
Round, full cut, choice grade, separable lean & fat, raw	17.5	7.4	7.8	.7	.2	66	
Separable fat from retail cuts, raw	70.9	31.0	32.4	2.6	1.0	99	
T-Bone steak, choice grade, lean only, raw	8.0	3.2	3.4	.3	Tr	60	
T-Bone steak, choice grade, separable lean & fat, raw	26.1	11.2	11.7	1.0	.3	71	
Cereal Grains							
Barley, bran	5.3	1.0	.6	2.7	.3	0	
Corn, germ	30.8	3.9	7.6	18.0	.3	0	
Oats, germ	30.7	5.6	11.1	12.4	1.4	0	
Rice, bran	19.2	3.6	7.3	6.6	.2	0	
Wheat, bran	4.6	.7	.7	2.4	.2	0	
Wheat, germ	10.9	1.9	1.6	6.6	.7	0	
Wheat, hard red winter	2.5	.4	.3	1.2	.1	0	
Dairy and Egg Products							
Cheese, Cheddar	33.1	21.1	9.0	.9	.4	105	
Cheese, Roquefort	30.6	19.3	8.5	1.3	.7	90	
Cream, heavy whipping	37.0	23.0	10.7	1.4	.5	137	
Milk, whole	3.3	2.1	1.0	.1	.1	14	
Egg yolk, chicken, raw	32.9	9.9	13.2	4.3	.1	1,281	
Fats and Oils							
Butter	81.1	50.5	23.4	3.0	1.2	219	
Butter oil	99.5	61.9	28.7	3.7	1.5	256	
Chicken fat	99.8	29.0	44.7	20.9	1.0	85	
Duck fat	99.8	33.2	49.3	12.9	1.0	100	
Lard	100	39.2	45.1	11.2	1.0	95	
Linseed oil	100	9.4	20.2	66.0	53.3	0	
Margarine, hard, soybean	80.5	16.7	39.3	20.9	1.5	0	
Margarine, hard, soybean and soybean (hydrog.)	80.5	13.1	37.6	26.2	1.9	0	
Margarine, hard, soybean (hydrog.) & palm	80.5	17.5	31.2	28.2	2.3	0	
Margarine, hard, soybean (hydrog.) & cottonseed	80.5	15.6	36.1	25.3	2.8	0	
Margarine, hard, soybean (hydrog.) & palm (hydrog.)	80.5	15.1	32.0	29.8	3.0	0	
Margarine, liquid, soybean (hydrog.), soybean, & cottonseed	80.6	13.2	28.1	35.8	2.4	0	
Margarine, soft, soybean (hydrog.) & cottonseed	80.4	16.5	31.3	29.1	1.6	0	
Margarine, soft, soybean (hydrog.) & palm	80.4	17.1	25.2	34.6	1.9	0	
Margarine, soft, soybean, soybean (hydrog.) & cottonseed (hydrog.)	80.4	16.1	30.7	30.1	2.8	0	

Food item	Total fat	Fatty acids					
		Total saturated	Total monounsaturated	Total polyunsaturated	18:3	Cholesterol	mg
g	g	g	g	g	g	mg	g
Fats and Oils—Con.							
Mutton tallow	100	47.3	40.6	7.8	2.3	102	
Rapeseed oil (Canola)	100	6.8	55.5	33.3	11.1	0	
Rice bran oil	100	19.7	39.3	35.0	1.6	0	
Salad dressing, comm., blue cheese, reg.	52.3	9.9	12.3	27.8	3.7	17	
Salad dressing, comm., Italian, reg.	48.3	7.0	11.2	28.0	3.3	0	
Salad dressing, comm., mayonnaise, imitation, soybean, w/o cholesterol	47.7	7.5	10.5	27.6	4.6	0	
Salad dressing, comm., mayonnaise, safflower & soybean	79.4	8.6	13.0	55.0	3.0	59	
Salad dressing, comm., mayonnaise, soybean	79.4	11.8	22.7	41.3	4.2	59	
Salad dressing, comm., mayonnaise-type	33.4	4.7	9.0	18.0	2.0	26	
Salad dressing, comm., Thousand Island, reg.	35.7	6.0	8.3	19.8	2.5	0	
Salad dressing, home recipe, French & soybean oil	70.2	12.6	20.7	33.7	1.9	0	
Shortening, household, lard & veg. oil	100	40.3	44.4	10.9	1.1	56	
Shortening, household, soybean (hydrog.) & cottonseed (hydrog.)	100	25.0	44.5	26.1	1.6	0	
Shortening, special-purpose, for bread, soy (hydrog.) & cottonseed	100	22.0	33.0	40.6	4.0	0	
Shortening, special-purpose, for cake mixes, soybean (hydrog.) & cottonseed (hydrog.)	100	27.2	54.2	14.1	1.1	0	
Shortening, special-purpose, heavy-duty, frying, soybean (hydrog.)	100	18.4	43.7	33.5	2.4	0	
Soybean lecithin	100	15.3	10.9	45.1	5.1	0	
Soybean oil	100	14.4	23.3	57.9	6.8	0	
Soybean oil (hydrog.) & cottonseed oil	100	14.9	43.0	37.6	2.8	0	
Soybean oil (hydrolyzed)	100	14.9	43.0	37.6	2.6	0	
Spread, margarine-like, about 60% fat, soybean (hydrog.) & palm (hydrog.)	60.8	14.1	26.0	18.1	1.6	0	
Spread, margarine-like, about 60% fat, soybean (hydrog.), palm (hydrog.), & palm	60.8	13.5	24.1	20.4	1.6	0	
Tomatoseed oil	100	19.7	22.8	53.1	2.3	0	
Walnut oil	100	9.1	22.8	63.3	10.4	0	
Wheat germ	100	18.8	15.1	61.7	6.9	0	
Lamb							
Lamb, leg, r. (83% lean, 17% fat)	17.6	8.1	7.1	1.0	.3		
Lamb, loin, r. (72% lean, 28% fat)	27.4	12.8	11.2	1.6	.5		
Lamb, leg, r. (87% lean, fat)	9.0	3.8	3.7	.6	.1		
Veal							
Lamb, leg, r. (83% lean, 17% fat)	17.6	8.1	7.1	1.0	.3		
Lamb, loin, r. (72% lean, 28% fat)	27.4	12.8	11.2	1.6	.5		
Veal, leg, r. (87% lean, fat)	9.0	3.8	3.7	.6	.1		

Food item	Total fat	Fatty acids					
		Total saturated	Total monounsaturated	Total polyunsaturated	18:3	Cholesterol	mg
g	g	g	g	g	mg	g	
Legumes							
Beans, common, dry	1.5	0.2	0.1	0.9	0.6	0	
Chickpeas, dry	5.0	.5	1.1	2.3	.1	0	
Cowpeas, dry	1.9	.6	.1	.8	.3	0	
Lentils, dry	1.2	.2	.2	.5	.1	0	
Lima beans, dry	1.4	.3	.1	.7	.2	0	
Peas, garden, dry	2.4	.4	.1	.4	.2	0	
Soybeans, dry	21.3	3.1	4.4	12.3	1.6	0	
Nuts and Seeds							
Beechnuts, dried	50.0	5.7	21.9	20.1	1.7	0	
Butternuts, dried	57.0	1.3	10.4	42.7	8.7	0	
Chia seeds, dried	26.3	10.5	7.3	7.3	3.9	0	
Hickory nuts, dried	64.4	7.0	32.6	21.9	1.0	0	
Soybean kernels, roasted & toasted	24.0	3.2	5.6	12.7	1.5	0	
Walnuts, black	56.6	3.6	12.7	37.5	3.3	0	
Walnuts, English/Persian	61.9	5.6	14.2	39.1	6.8	0	
Pork							
Pork, cured, bacon, raw	57.5	21.3	26.3	6.8	.8	67	
Pork, cured, breakfast strips, raw	37.1	12.9	16.9	5.6	.9	69	
Pork, cured salt pork, raw	80.5	29.4	38.0	9.4	.7	86	
Pork, fresh, ham, raw	20.8	7.5	9.7	2.2	.2	74	
Pork, fresh, jowl, raw	69.6	25.3	32.9	8.1	.6	90	
Pork, fresh, leaf fat, raw	94.2	45.2	37.2	7.3	.9	110	
Pork, fresh, separable fat, raw	76.7	27.9	35.7	8.2	.7	93	
Poultry							
Chicken, broiler fryers, flesh & skin, giblets, neck, raw*	14.8	4.2	6.1	3.2	.1	90	
Chicken, dark meat, w/o skin, raw*	4.3	1.1	1.3	1.0	Tr	80	
Chicken, light meat, w/o skin, raw*	1.7	.4	.4	.4	Tr	58	
Chicken, skin only, raw*	32.4	9.1	13.5	6.8	.3	109	
Turkey, flesh, with skin, roasted*	9.7	2.8	3.2	2.5	.1	82	
Vegetables							
Beans, Navy, sprouted, cooked	.8	Tr	Tr	.5	.3	0	
Beans, pinto, sprouted, cooked	.9	Tr	Tr	.5	.3	0	
Broccoli, raw	.4	Tr	Tr	.2	.1	0	
Cauliflower, raw	.2	Tr	Tr	.1	0		